



SDK

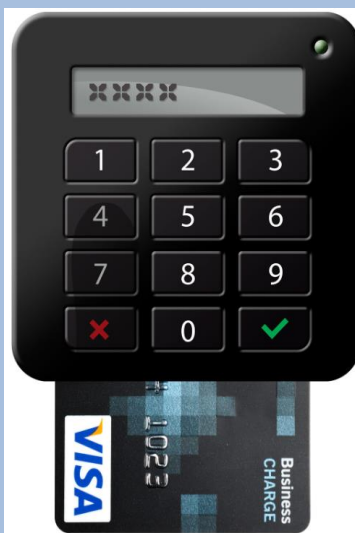
Overview

Document Control

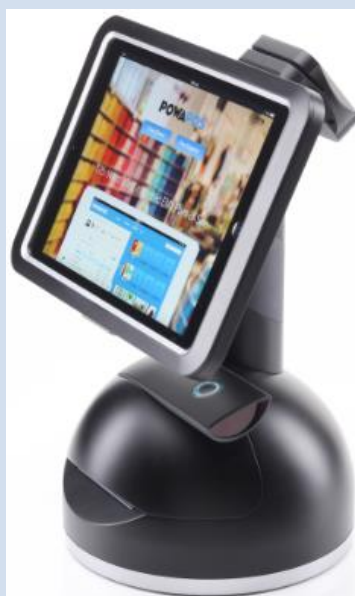
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0.3	Merged with PowaPOS SDK product sheet. <ul style="list-style-type: none">Added extra SDK descriptionAdded supported platforms tableAdded compatible platform logos	Thomas Clayson
0.4	Added product images.	Thomas Clayson

PowaPOS Product Range

PowaPIN 100



T-series T25



Contents

1 Introduction	3
1.1 PowaPIN-series	3
1.2 T-series	3
2 SDK Overview	3
2.1 Application	4
2.2 Widgets Library	4
2.3 PowaPOS SDK	5
2.4 External Systems	5
3 Platforms	6
4 Included Components	7
5 Support	7
6 Accreditation	7



1 Introduction

This document is intended to provide a technical high-level overview of the PowaPOS SDK, its features and intended usage.

1.1 PowaPIN-series

The PowaPIN-series are a product range of chip and PIN readers designed to interface with a mobile phone via Bluetooth. They have support for integrated chip cards and MSR cards as well as full EMV and PCI compatibility and accreditation.

1.2 T-series

The T-series are a product range of tablet-based electronic point of sale devices. They are designed to hold a tablet for a point of sale application and will interface with a series of traditional or mobile payment terminals.

2 SDK Overview

The PowaPOS SDK provides a tool for 3rd party software developers to easily integrate the PowaPOS product range into their vertical applications without the need for payments industry experience. It is designed to work seamlessly with your existing smartphone and tablet applications, enabling them to take advantage of more efficient and ergonomic PowaPOS hardware platforms.

As a single API for all POS peripheral device and payment system interfaces, PowaPOS SDK provides developers with a simple integration solution for their APP to the PowaPOS PowaPIN and T-Series hardware. Standard interfaces are provided for the integrated printer, barcode scanner, cash drawer and M10 payment devices. In addition, PowaPOS SDK can provide support for a growing list of third party Pinpads and other 3rd party peripherals when required.

PowaPOS SDK has also been implemented to address the ongoing costs associated with PCI-DSS compliance by establishing an out-of-scope environment for integrated payment applications. By providing a secure and firewalled interface to PCI and EMV compliant devices, PowaPOS SDK allows software providers to save thousands of dollars in ongoing assessment and certification fees.

The following is a system overview diagram showing the role of the PowaPOS SDK within the context of a 3rd party payments application.





2.1 Application

The application layer contains the presentation logic including all Payment operations orchestration.

The Customer application uses the exposed API and higher level Widgets library to integrate Powapos functionality into their applications.

2.2 Widgets Library

The Widgets represent snippets of commoditised payments functionality including the respective User Interface. The purpose for providing this library is to accelerate the development of customer applications by providing ready-made objects and views that can be deployed swiftly into a mobile point of sale application.

Based on this concept, a Customer application can be built simply by combining pre-existing proven and documented blocks.

The Widgets include the necessary configuration properties to customise them according to the look and feel of the host Application allowing the Widgets to integrate seamlessly into the look and feel of your app.



2.3 PowaPOS SDK

The SDK provides an abstracted interface to all the devices part of the PowaPOS architecture as well as the Server functionality.

The SDK implements the basic Payments Logic to minimise the complexity visible from the Customer Application. It also abstracts and groups related functionality by type (PED, Peripherals and Server).

Functional groups have the same behaviour independently of the drivers in use (example: if two different printer drivers are connected, the exposed functionality is the same – Print Receipt).

PowaPIN functionality is provided in two different modes:

Mode 1 – Integration to PowaPIN is transactional with minimal API function calls. For example, to process a transaction you call function startTransaction ()

Mode 2 – More granular control is given to the 5 component 5 componentes such as MSR, ICC, display, pinpad, etc.

The available Drivers/Servers can be swapped or added to allow flexible deployments. The SDK supports integration of a Customer written Server abstraction (according to the Powa specified interface), to allow for server customisation.

All the supported drivers have an “emulation” mode that allows them to be used without a physical device connected.

PowaPOS SDK supports both PowaPIN Series, T-Series & 3rd party PINPad implementations according to the following table:

	PowaPIN	3 rd Party PEDs	Cash Drawer	Printer	Scanner	Server
PowaPIN-Series	✓	✗	✗	✗	✗	✓
T-series	✓	✓	✓	✓	✓	✓

2.4 External Systems

External systems include all the SDK supported physical devices and Servers part of the overall architecture.



The PowaPIN device has a known device driver that fits in the architecture with a well defined interface. 3rd party devices may have different levels of existing driver support but will be supported via the same API interface. Integration to 3rd party POS terminals will be via their cash register interface using existing payment applications.

Powa provides an emulator for each supported device and server. This allows any prospect customer to try the architecture without possessing any physical devices or server connections.

3 Platforms

Smart Phone and Tablet Operating Systems Supported	<p>Android</p> <ul style="list-style-type: none"> • Honeycomb 3.x • Ice Cream Sandwich 4.0x • Jelly Bean 4.1x – 4.3.1 • KitKat 4.4x + <p>iOS</p> <ul style="list-style-type: none"> • Version 5+ <p>Windows Mobile*</p> <ul style="list-style-type: none"> • Version 8.0 + <p>Blackberry*</p> <ul style="list-style-type: none"> • Version 10.1 + <p>Windows Store*</p> <ul style="list-style-type: none"> • Version 8.x
Windows Desktop	<p>Embedded XP</p> <p>Windows XP SP3</p> <p>Vista 32/64 bit</p> <p>Windows 7 32/64 bit</p> <p>Windows 8.x 32/764 bit</p>
Supported Browsers	<p>Safari</p> <p>Windows Explorer</p> <p>Firefox</p> <p>Chrome</p>
Development Environment	<p>System Requirements</p> <p>Minimum: 400 MHz CPU, 96 MB RAM</p>



	Recommended: 1.0 GHz or higher CPU, 256 MB or more RAM 20MB of HDD space; up to 520 MB required if .NET 3.5 Framework is not installed. The PowaPOS SDK is provided with a Windows 32-bit or 64-bit installer.
Standard Peripherals and Interfaces	PowaPOS T-Series printer PowaPOS T-Series 2D Barcode Scanner PowaPOS T-Series Cash Drawer PowaPOS M10 payment terminal PowaPOS Server 3rd party payment terminals

4 Included Components

- Software APIs
- Documentation
- Sample Code & Applications

5 Support

World-class support will be provided to software developers looking to use the PowaPOS SDK. A dedicated engineering team will provide implementation support and following integration ongoing support will be available by email, phone or through online forums and chat.

Support is available during normal business hours with extended hours available subject to commercial agreement.

A dedicated developer portal will be available with forums, chat and downloads for the latest versions of the software.

6 Accreditation

A certification process is available to validate integration and proper functionality of the SDK. Certified applications will be listed on our website.

